



## DEPARTMENT OF ENERGY

Oakland Operations Office  
1301 Clay St.  
Oakland, California 94612-5208

June 7, 2000

TO: Offerors

SUBJECT: Executive Summary - Request for Proposals No. DE-RP03-00SF22042  
System Integration of a Stirling Radioisotope Power System

### Introduction

The Department of Energy (DOE) Oakland Operations Office (OAK) requests proposals for the Systems Integration of a Stirling Radioisotope Power System (SRPS). This letter summarizes the background and the salient elements of the solicitation. It is not an integral part of the solicitation. In the event of any conflict between this executive summary and the solicitation, the solicitation will prevail.

### Background

NASA's space exploration plans encompass a broad set of missions to extensively explore the planets and regions beyond the Earth's orbit. For missions where radioisotope power sources are required, DOE has the responsibility to develop and fabricate the power systems. To meet the requirements for a lighter and more efficient radioisotope power system for future missions, DOE will be designing and qualifying a power system based on the Stirling Convertor. The Statement of Work is based on using a 55 watt-electric Stirling Convertor developed by the Stirling Technology Co. However, DOE will consider alternative Stirling technology designs other than the Stirling Technology Company (STC) engine only if those alternative designs meet all of the requirements set forth under Clause M.002, "Qualification Criteria - Phase I". Prospective Offerors should review the performance areas (a) through (d) listed under Section M, EVALUATION FACTORS FOR AWARD, Clause M.002, "Qualification Criteria - Phase I" and the associated references (1) through (6). References (1) through (6) are available either electronically or as hard copy. Requests for hard copies should be directed to the attention of Wayne Bryan, Contract Specialist, at 1301 Clay Street, Room 700N, Oakland, Ca 94612 or [wayne.bryan@oak.doe.gov](mailto:wayne.bryan@oak.doe.gov).

### Purpose of Solicitation

The purpose of the solicitation is to select a Systems Integration Contractor for the SRPS Project. OAK is interested in receiving offers from qualified commercial sources capable of planning, engineering, design, fabrication, testing, inspection, documentation, technical assistance, and project management to support the SRPS Project.

The contractual effort will consist of three separate phases. The Phase I effort shall include a SRPS Conceptual Design, in addition to a detailed technical proposal and cost estimate for Phases II and III. Phase II will require the design, development, demonstration and qualification of the SRPS. Phase III will require fabrication, assembly and acceptance testing of SRPS flight units in support of specific missions. Details regarding the work scope for Phases I, II, and III can be found in the Statement of Work, provided as Section J, Attachment I of the RFP.

It is DOE's intent to award multiple contracts for the Phase I effort. Based on the Conceptual Design Review at the end of Phase I and evaluation of the Phase II/III proposals submitted as part of the Phase I effort, one contractor may then be selected for the Phase II/III effort.

This solicitation contains the model contract, Statement of Work, Reporting Requirements and Contractor Data Requirements List (CDRL), the proposal preparation instructions, and evaluation criteria for all Phases. Offerors should note that no other solicitation will be issued for the Phase II/III effort and that only the successful offerors selected for the Phase I effort will be allowed to submit a proposal for Phase II/III.

The model contract contained in the solicitation contains all the terms and conditions for all phases. Clauses or sections of clauses applicable only to Phase I or Phase II/III are identified as such.

Offerors should also note that the technical proposal for Phase I requires only that offerors provide information as to their capability to be a system integration contractor, past performance, and the design and technical approach anticipated by the contractor (see Criterion 1 through 4 outlined in Section L, paragraph L.043 under the heading Phase I Proposal). The Phase I technical proposal should not exceed 25 pages in length.

#### Contract Type

For the Phase I effort the contract type will be firm fixed price up to \$650K each and a duration of up to six months. If a decision is made to continue with the Phase II/III effort the contract will be negotiated as a cost reimbursement plus fixed fee.

#### Contents of Solicitation

Sections B through J of the solicitation represent the draft contract and will be the basis for the contractual relationship between DOE and the selected offeror. Section K addresses the representations, certifications, and other statements of the offerors which should be completed and submitted in Volume I of the proposal. Section L represents the instructions, conditions, and notices to offerors. Section M addresses the evaluation factors which are the basis for award. Attachments contained at the end of the solicitation are used when preparing and submitting proposals in accordance with the proposal preparation instructions in Section L.

### Contract Duration

The contract duration contemplated for Phase I is 6 months. The contract duration contemplated for Phase II/III is 6 years.

### Security Clearances

The systems design and integration of the SRPS is unclassified. However, some of the interactions with DOE/Mound, NASA, and other entities may require personnel with appropriate security clearances. It is anticipated that approximately four "L" level clearances will be necessary for the interaction with DOE/Mound and 15 "L" level clearances may be needed for dealings with NASA at the launch site.

### Preproposal Conference

A preproposal conference will not be held. All questions concerning this solicitation should be submitted by fax or e-mail to Wayne Bryan, Contract Specialist. The fax number is (510) 637-2004. The e-mail address is [wayne.bryan@oak.doe.gov](mailto:wayne.bryan@oak.doe.gov). Written responses to all questions received by fax or e-mail by May 26, 2000 will be posted as an amendment to the solicitation on the Internet at <http://www.oak.doe.gov>.

As ordinarily, issued on May 19, 2000, the Executive Summary provided that "Written responses to all questions received by fax or e-mail by May 26, 2000 will be posted as an amendment to the solicitation on the Internet at <http://www.oak.doe.gov>. The "May 26, 2000" date remains unchanged.

### Proposal Responses

In accordance with FAR 35.017-1, "Sponsoring Agreements", (c)(4), Federal Funded Research & Development Centers (FFRDCs) are prohibited from competing against non-FFRDCs in response to the RFP.

Proposal responses to the Solicitation are due to be delivered to the U.S. Department of Energy, Mail and Records Room, 1301 Clay Street, Room 700N, Oakland, California, 94612, not later than 3:00p.m. local time on June 26, 2000. (See Part II-Section L, Clause L.007 of the Solicitation Document for detailed delivery instructions).

Please advise Mr. Wayne Bryan, of your intention submit a proposal in response to this Solicitation by returning Attachments IX, "Intention To Propose" form.

Sincerely,

Original signed by

Aundra Richards  
Contracting Officer